

UNCLASSIFIED

AD NUMBER
ADB235264
NEW LIMITATION CHANGE
TO Approved for public release, distribution unlimited
FROM Distribution authorized to DoD only; Specific Authority; May 98. Other requests shall be referred to Chief of Naval Operations, Manpower and Personnel [N1B], Washington, DC 20350.
AUTHORITY
19990505 - Center for Naval Analyses, Document Control Manager.

THIS PAGE IS UNCLASSIFIED

A Summary of Navy Recruiting Efforts in Community Colleges in FY 1997

Peggy A. Golfin

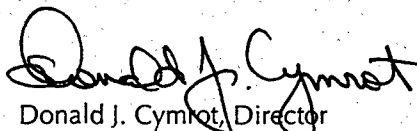
19980514 060

Center for Naval Analyses

4401 Ford Avenue • Alexandria, Virginia 22302-1498

Approved for distribution:

N



Donald J. Cymrot, Director
Manpower, Personnel, and Training Team
Support Planning and Management Division

This document represents the best opinion of CNA at the time of issue.
It does not necessarily represent the opinion of the Department of the Navy.

Distribution limited to DOD agencies. Specific authority: N00014-96-D-0001.
For copies of this document call: CNA Document Control and Distribution Section at 703-824-2943.

REPORT DOCUMENTATION PAGE

Form Approved
OPM No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources gathering and maintaining the data needed and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22302-4302, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

1. AGENCY USE ONLY (Leave Blank)		2. REPORT DATE March 1998	3. REPORT TYPE AND DATES COVERED Final
4. TITLE AND SUBTITLE A Summary of Navy Recruiting Efforts in Community Colleges in FY 1997			5. FUNDING NUMBERS N00014-96-D-0001 PE - 65154N PR - R0148
6. AUTHOR(S) PA Golfin			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Center for Naval Analyses 4401 Ford Avenue Alexandria, Virginia 22302-1498			8. PERFORMING ORGANIZATION REPORT NUMBER CRM 97-139
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) Assistant Deputy Chief of Naval Operations for Manpower and Personnel (N1B) Wash., DC 20350			10. SPONSORING/MONITORING AGENCY REPORT NUMBER
11. SUPPLEMENTARY NOTES			
12a. DISTRIBUTION AVAILABILITY STATEMENT Distribution authorized to DOD components only. Other requests for this document must be referred to the sponsor.			12b. DISTRIBUTION CODE
13. ABSTRACT (Maximum 200 words) This paper summarizes FY 97 efforts to increase the recruitment of community college graduates, specifically targeting the recruitment of graduates with allied health care specialties. It compares the efforts and results for the last two years and offers recommendations for FY 98. Despite many new efforts initiated in FY 97 aimed at the community college market, only 17 more recruits had Associate degrees in FY 97 than in FY 96. Since the shift from recruiting from high school to the community college market is a major change, it will take some time to make significant progress. it appears more resources are needed for the general recruiting effort and possibly a further increase is necessary to expand community college recruiting.			
14. SUBJECT TERMS Costs, demography, education, enlistment, naval training, outsourcing, quality, recruiting, recruits, schools, training			15. NUMBER OF PAGES 64
			16. PRICE CODE
			17. LIMITATION OF ABSTRACT SAR
18. SECURITY CLASSIFICATION OF REPORT Unclassified	19. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	20. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	

Contents

Summary	1
Background.	1
The Navy's current efforts	2
Short-term difficulties	3
Recommendations	4
 Introduction	 7
 FY 97 community college recruiting	 11
Absolute and relative numbers of accessions	11
Navy recruiting initiatives	13
College Loan Repayment.	13
Articulation agreements	15
CNRC intranet showcase	17
Advanced Programs Outreach Teams	18
Other efforts	21
Factors outside Navy recruiting	21
Military recruiter access to campus law	22
Hope Scholarship.	23
American Association of Community Colleges	24
 FY 98 initiatives	 27
CD-ROM	27
Partnership with Florida Community College	27
Advertising recommendations.	28
RADs.	28
Internet	29
Recruiter Qualifications Standards	31
CNRC conferences	31
Dr. Busky's handbook	31
 Pretrained HMs and electronics technicians	 33
Background on recruiting pretrained HMs.	33

General characteristics of HMs	33
What worked and what didn't for HMs?	36
FY 97 efforts	38
FY 96 methods.	38
HM lessons learned	42
Recruiting pretrained electronics technicians	43
Background	43
Assessing qualifications	44
Incentives for electronics graduates	45
Recommendations	46
The larger picture	46
Recommendations.	49
Appendix: Characteristics of pretrained HM recruits	51
References	53
List of figures	55
Distribution list	57

Summary

Since the fall of 1995, CNA has worked with Navy Recruiting Command to increase the recruitment of community college graduates in general and to target the recruitment of graduates with allied health care specialties. Reference [1] documents the results of this work for FY 96. In this paper, we summarize FY 97 efforts, compare the efforts and results for the 2 years, and offer recommendations for FY 98.

Background

In the past year, President Clinton proposed to expand educational opportunities through his Hope Scholarship program. Hope Scholarships would provide a tax credit of up to \$1,500 for attending 2 years of college. Clinton's goal is to "make 14 years of education—at least 2 years of college—the standard for all Americans."

The President's proposal taps into a long-term trend in the United States—the expansion of the community college market. Both industry and the federal government are sponsoring programs to increase the technical training of young adults, primarily through postsecondary training at community colleges. In fact, for the 1994 graduating class, less than 3 of every 10 graduates were *not* attending some postsecondary institution within 2 years of graduation. Enrollments in community colleges are at record levels and increasing at an even faster rate than enrollments in 4-year colleges.

The growth of the postsecondary market is of profound importance for enlisted recruiting. Well over 90 percent of the Navy's enlisted recruits are high school graduates, but less than 1 percent are community college graduates. As the share of high school graduates going directly to the labor market shrinks, enlisted recruiting could become more difficult. A shift of some recruiting effort and resources might expand the market for enlisted recruits to offset this trend.

Community college recruiting offers the Navy some other potential benefits. First, these recruits historically have even lower first-term attrition than those with a high school degree. Second, the graduation cycle for community college is somewhat different from that for high school. This difference could alleviate some of the peak-load pressures on boot camp. Third, because they score higher on average on the Armed Services Vocational Aptitude Battery, many community college graduates qualify for critical ratings at higher than average rates. Finally, those with civilian-acquired skills that the Navy needs offer the potential for saving training costs.

The Navy's current efforts

In March 1996, the Navy started a program to recruit pretrained community college graduates with majors in radiography or clinical lab technician for the Hospital Corpsman (HM) rating. It chose the HM rating because many of the Navy C-schools for this rating are accredited by civilian groups. Reference [2] reports the results. For FY 97, the Navy added three more specialties: surgical technologists, pharmacy technicians, and dental hygienists (a specialty in the Dental Technician (DT) rating). As a result of this experiment, both headquarters and field recruiters initiated efforts in FY 97 aimed at the community college market. Among these efforts were:

- College Loan Repayment program for those entering a critical rating
- Recruiter incentive system points awarded for any college graduate
- Formation of Advanced Programs Outreach Teams
- Articulation agreements (i.e., formalized partnerships) between Navy Recruiting Command and community colleges
- Formation of an intranet showcase with access to community-college-related materials for the field
- Recruiting Advertising Devices (RADs) for targeted programs
- A monthly community college newsletter for all of recruiting.

In spite of these efforts, only 17 more recruits had Associate degrees in FY 97 than in FY 96. Although this represents a 4.8-percent increase from the previous year, the number has actually declined by 12 percent since FY 94.

The results are similar in the efforts to recruit pretrained people. The Navy recruited 21 in the first 9 months of the original experiment and only 8 after October 1996.

Short-term difficulties

Shifting recruiting from the high school graduate to the community college market is a major change, so the fact that the Navy did not make significant progress in one year should come as no surprise. This is particularly true in the current environment in which the Navy is struggling just to make its recruiting goal. To be successful over time, the Navy will have to make both cultural and resource changes in its recruiting efforts.

Historically, recruiters have had very little experience with the college market. This unfamiliarity is likely to foster uncomfortable feelings in this new environment. Because most enlisted recruiters are high school graduates, they have had little or no exposure to college campuses. Many have the misconception, often passed down from the most senior recruiters, that this is an unproductive market. Furthermore, until recently Navy Recruiting Command has provided little support or incentive to spend significant amounts of time on these campuses. It will probably take time and continued command attention to change the attitude of the production recruiters to emphasize the community college market.

The current state of recruiting and predictions that FY 98 will be a particularly difficult year exacerbate the situation. Why will FY 98 be so difficult? First, the size of the mission is increasing as the downsizing ends. Reducing recruiting was one of the main tools used to downsize the force. With the end of the downsizing, the recruiting mission has increased to stabilize strength.

Second, recruiting enters the year in a relatively poor Delayed Entry Program (DEP) posture. Consequently, recruiters must spend an unusual amount of time looking for workforce recruits who can ship immediately, which creates a vicious cycle. Direct shippers have higher attrition, which results in higher goals.

Third, the unemployment rate is at its lowest level in over 20 years. Selling the Navy becomes increasingly difficult as the number of civilian jobs expands.

Recommendations

Because of these immediate difficulties, recruiters have little time to spare in investing in the community college market. Therefore, the slow progress is not surprising. It appears that more resources are needed for the general recruiting effort and possibly a further increase is necessary to expand community college recruiting. At present there is little understanding about the relative cost of community college and high school recruiting. It would not be surprising if community college recruiting, particularly during a transition period, would be more expensive than high school recruiting. Of course, the payoff for these recruits may be lower training costs and lower future recruiting goals because of lower attrition.

Once adequate funding is available, the Navy may want to invest in opening this new market. Below we offer some recommendations for doing so. Because of the lack of comprehensive data on recruiting in this market, the Navy should weigh the cost of each recommendation against the potential benefits. We suggest exploring the following:

- Expand the College Loan Repayment to include *all* college graduates.
- Develop a more comprehensive articulation agreement with community colleges.
- Require recruiters to attend community college job fairs.
- Encourage recruiters to take a class on campus during the day, using Tuition Assistance, and to attend in uniform.

- Request name lists from all 2-year and 4-year colleges under the Military Recruiter Access to Campus Law.
- Attend the American Association of Community Colleges' annual conference, both as a participant and as an exhibitor.
- Create more RADs for this market.
- Use the Internet more for both general and targeted advertisement and resume searches.
- Incorporate community college visits in the Recruiter Qualifications Standards.
- Send letters to the program directors of targeted majors.
- Develop Tech Prep partnerships with community colleges that can benefit both the college and the Navy in recruiting graduates in general and pretrained people in particular.

Finally, the Navy's resource allocation system must recognize that recruiting community college graduates is an investment that will generate future benefits. By increasing spending on recruiting these sailors in the short run, the Navy may be able to reduce its training and future recruiting costs in the long run. The payoffs may not be immediate because there will be a period of learning how best to take advantage of the opportunities available in the community college market. Once the Navy overcomes the initial hurdles, it will be in position for the structural and demographic changes in the future.

Introduction

For more than 2 years, CNA has been working closely with Navy recruiting on efforts to increase recruiting from community colleges, including the recruiting of pretrained people [1, 2]. This market is especially attractive because:

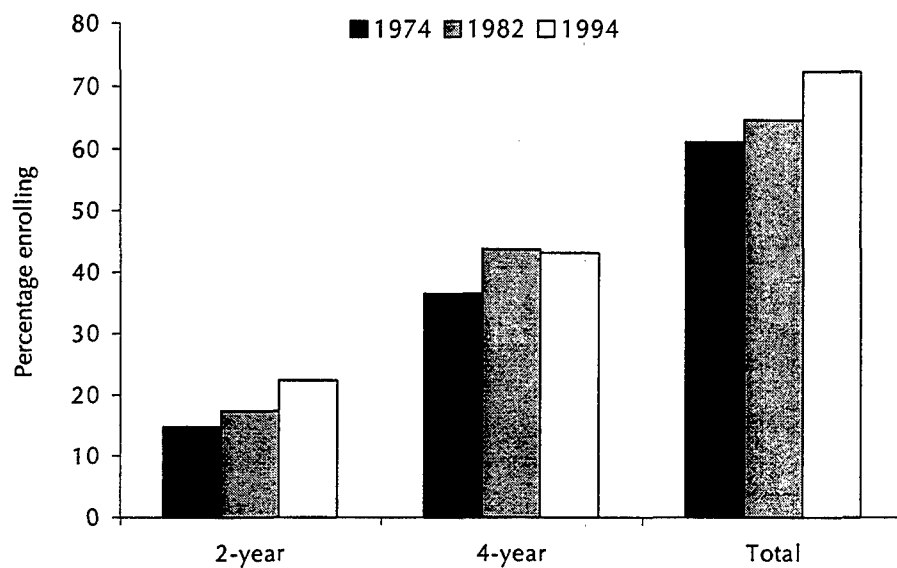
- It is a large, relatively untapped market. Of the more than 540,000 graduates with Associate degrees each year, the Navy accesses less than 400.
- On average, community college graduates have higher Armed Forces Qualification Test (AFQT) scores than high school graduates.
- Associate degree recruits have lower first-term attrition than most other recruits, including high-quality high school degree graduates.
- Many students graduate during off-peak recruiting months (January, May, and August) when recruiters have difficulty meeting goals.
- Pretrained people have the potential for reducing training costs.

Recently, the potential of the community college market for recruiting has been growing. Figure 1 shows the trend for enrollment in postsecondary institutions within 2 years of high school graduation for 1974, 1982, and 1994. For 1994 high school graduates, 72.3 percent attended either a 2-year, 4-year, or vocational-technical institution within 2 years of graduation. The proportion enrolling in 4-year institutions remained fairly steady from 1982 to 1994; however, the propensity to enroll in community college has increased.

And what does the future look like? According to the National Center for Education Statistics, the average annual rate of increase in enrollment in 2-year institutions will be 1.3 percent for 1995 to 2007 [4].

The government bases this forecast on both an increase in the population of 18- to 24-year-olds and an increase in the propensity to attend college, resulting in part from federally funded incentives to help reduce the cost of a college education. We will outline some of these incentives in a later section.

Figure 1. Percentage of students attending a postsecondary institution within 2 years of high school graduation^a



a. Source: [3].

These statistics indicate that the Navy's traditional recruiting market for enlisted people is shrinking. Recruiters focus much of their effort on the high school market, yet less than 3 of every 10 high school graduates do not have near-term college plans, and we expect that number to decrease through 2007.

A prolonged period of low unemployment and a shrinking pool of both active duty and retired military personnel to increase Navy awareness are two reasons why recruiting is more difficult. Changes in the propensity to enlist capture the impact of all these factors. (Reference [5] defines a positive propensity as responding "definitely" or "probably" to a question of how likely a person is to serve on active

duty in one of the services.) For the Navy, the positive propensity among males has declined from 9.9 percent in 1991 to 7.8 percent in 1996 [5].

In addition to these factors, Navy recruiting will be particularly difficult in FY 98 for the following reasons:

- The goal is 11.2 percent higher than the FY 97 goal [6].
- Because of budget cuts in FY 97, the number of recruiters on board in FY 98 is well below target. For instance, only 81 percent of the target of 4,000 production recruiters were on board in October.¹
- The Delayed Entry Program (DEP) is very low, mostly from depletion of DEP to meet the summer 1997 goals.¹

The Navy is trying to address these problems, mainly by increasing the number of recruiters. But that isn't enough to solve the problem for FY 98. According to a recent *Navy Times* article [6], in FY 97 each recruiter needed to recruit about 15 people. Even with the increase in recruiters, for FY 98 that number is closer to 16 people. And it takes time to train a recruiter and for efforts to begin to produce results.

What other market has the same potential as the community college market for addressing the difficulties that Navy recruiting will have in FY 98 and beyond? This is a large, relatively untapped market that answers the need for high-quality recruits who can access during off-peak months to help with level-loading efforts. What we do not know, however, is the relative "cost" of a community college graduate in terms of recruiter time and enlistment incentives compared to the savings in attrition and retention. The answer to this question is beyond the scope of this study, but it is an important issue that needs attention.

Interest in the community college market has fluctuated over time, as demonstrated by the variation in recruits from this market over time, which we will illustrate later. Navy Recruiting Command has focused more attention on this market recently. Beginning in February 1996,

1. September 1997 monthly recruiting brief to CNP.

it began an experiment to recruit pretrained Hospital Corpsmen with Associate degrees in one of two subspecialties. The initial focus of the experiment was to determine the feasibility of recruiting people who had civilian training that was comparable to Navy training in order to reduce the cost of training. But the experiment had another goal. Because most of these pretrained people would have received their training on a community college campus, the process of recruiting them would provide an opportunity for recruiters to gain access to the community college market. References [1] and [2] contain the details of this experiment and an analysis of the results of the first months.

Both the recruiting of pretrained people and the efforts to increase the activities of recruiters on the community college campus have continued since the original experiment began 2 years ago. This paper will describe some of the results of these ongoing initiatives. In the first section, we will discuss general recruiting efforts on the community college market. We will then look at efforts to recruit pretrained community college graduates.

FY 97 community college recruiting

In February 1996, CNRC sent a memorandum to all Area and Navy Recruiting District (NRD) commanding officers. It outlined the targeted recruiting of pretrained Hospital Corpsman (HM) recruits and directed each NRD to develop a program for recruiting 2-year-college graduates, including the formation of an Outreach Team comprising key recruiting personnel. The memorandum contained a detailed Plan of Action and Milestones (POA&M) outlining steps that could aid in breaking into this market.

In August 1996, CNRC issued another memorandum removing the "experiment" label and opening the HM pretrained program to all NRDs. The memorandum urged all recruiters to incorporate community colleges into their recruiting market and provided each NRD with basic information on all community colleges in the NRD with enrollments of at least 4,000.² CNRC reiterated the importance of this market throughout the year. For instance, the Area Commanding Officers Conference at CNRC headquarters in January 1997 included a brief on community college recruiting. Other support was provided to the field throughout the year, which we will discuss later.

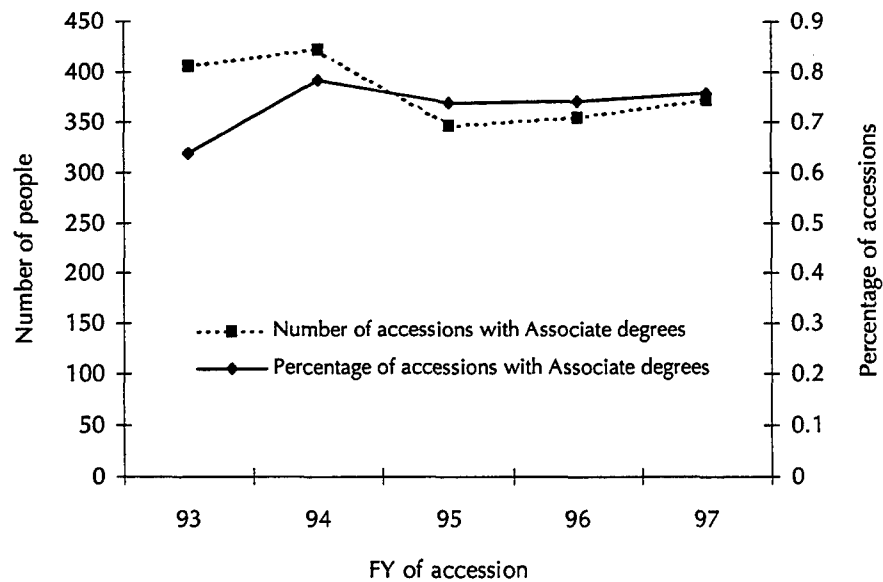
Absolute and relative numbers of accessions

Can we measure the success of these efforts? Although our previous work has emphasized the benefits of community college graduates (primarily in terms of attrition), an increase in efforts to recruit from community colleges could result in an increase in students who, for a variety of reasons, either do not complete their degrees or terminate

-
2. In addition, any community college offering a degree in one of the following disciplines, regardless of enrollment, was included: Arabic, Chinese, Farsi, Hebrew, Korean, Russian, Serbo-Croatian, Vietnamese, Clinical Lab, Surgical Technician, Dental Hygiene, and Nuclear Technology/Nuclear Engineering.

their education after receiving certificates. Thus, to track the results of CNRC's efforts to increase recruiting on community colleges, we need to look at the numbers of people with Associate degrees, as well as those with education beyond high school who have not earned college degrees. Figures 2 and 3 illustrate the results of these efforts for both groups. Figure 2 shows the absolute and relative changes in the number of accessions with Associate degrees since FY 93; figure 3 illustrates the same thing for people with 13 or 14 years of college. For both figures, the dashed line represents the absolute number of community college accessions, and the solid line shows the percentage of total accessions that these people represent (i.e., the number of community college accessions divided by the total number of enlisted accessions).³

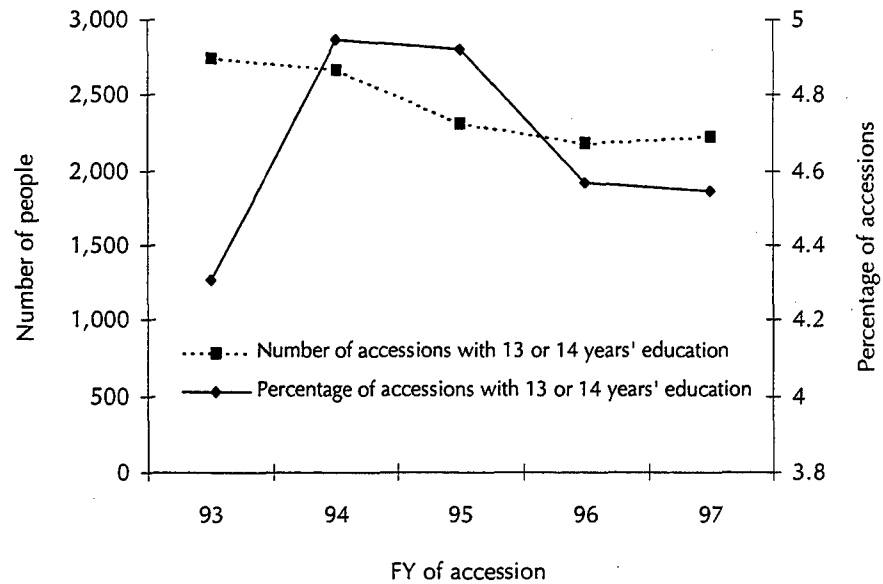
Figure 2. Absolute and relative numbers of accessions with Associate degrees^a



a. Data are from CNA's Enlisted Master File.

3. These raw numbers cannot tell us whether the recruits came from the college campus. The only way to get a precise measure of the increase in accessions from the college campus would be to query the recruits (or their recruiters) individually.

Figure 3. Absolute and relative numbers of accessions with 13 or 14 years of education^a



a. Data are from CNA's Enlisted Master File.

The absolute increase in the number of accessions with Associate degrees from FY 96 to FY 97 is 17 people, a 4.8-percent increase. The increase in accessions with 13 or 14 years of education is 47 people, for a 2.2-percent increase during the same time frame.

Navy recruiting initiatives

Numerous CNRC initiatives in FY 97 have direct impact on the community college market. We will discuss some of them here.

College Loan Repayment

In previous analyses of the Navy's efforts in community colleges, we recommended that CNRC investigate the feasibility of reinstituting the College Loan Repayment (CLR) for all community college graduates [1, 2]. To safeguard against disproportionately attracting recruits who have incurred unusually large debts, we suggested limiting the total loan repayment, perhaps to \$10,000. We based this recommendation, in part, on the fact that the Army was the only service

making use of that enlistment incentive. This, along with other enlistment incentives (for instance, accession at the E4 or E5 level under the Army Civilian Acquired Skills Program), could make the Army more attractive to community college or pretrained recruits. In FY 95, the Army offered up to \$55,000 in college loan repayment.

In the spring of 1997, the Navy approved a pilot Loan Repayment Program (LRP), to commence on 1 July 1997. The specifics of the program are as follows:⁴

- Eligible ratings include ETS, FT, MT, STS, CTM, AECE, CTI, STG, AIRC, AIRR, AC, AT, and NF.
- The applicant must score in the upper AFQT categories.
- Total loan repayments may not exceed \$10,000.
- The applicant must be a high school graduate.

Thus, the program is open only to those in critical ratings and is not confined to college graduates. The rest of the provisions of the program are in line with the requirements in Title 10, which authorizes the services to offer a college loan repayment incentive.⁵

In the few months that this incentive has been available, no recruit has accepted the LRP. The field, however, has reported success using this incentive as a hook to attract people. Once they have shown interest, the recruiter is able to discuss other enlistment incentives for which these people are eligible.⁶ For instance, most of these critical ratings have enlistment bonuses that far exceed the average college loan indebtedness.⁷ And, people enlisting in most of these ratings are eligible for the Navy College Fund (NCF), the total for which is also

4. 17 June 1997 CNRC 1100 Memorandum.

5. For instance, these include the requirements that the service pay the loan in thirds, on an annual basis, commencing after completion of the first year of active duty, and that the loans be federally funded, such as Perkins or Stafford loans.

6. CNRC Codes 524 and 331 provided this information.

7. The average loan indebtedness of a person with an Associate degree in 1996 was \$1,100 [1].

much larger than the average loan indebtedness.⁸ A person may take only one enlistment incentive, and, for a majority of the population, the LRP offers the least economic incentive.

Given the lack of any significant increase in college graduate accessions in FY 97, we still believe that the LRP should be offered to all college *graduates*, and not just those entering critical ratings. Why? For instance, this incentive is not open to pretrained HM recruits. Even at the maximum of \$10,000, this is ultimately a cost-effective incentive for these people. And what about other graduates, who are not eligible (or interested) in these critical ratings? Accessions with Associate degrees or Bachelor's degrees have lower attrition, which also saves the Navy money. Measuring the savings in lower attrition, versus the cost of a college loan repayment program (particularly for those with Bachelor's degrees who typically have higher indebtedness) is beyond the scope of this study, but we believe it is worth investigating. But at an average indebtedness of only \$1,100 for those with Associate degrees, it seems likely that the benefits outweigh the costs of these types of accessions.

Similarly, we have argued previously [1] that the Navy should offer an enlistment bonus of \$2,000 to \$3,000 to *all* college graduates, regardless of major. Their higher quality, lower attrition, and fewer disciplinary problems help to offset the cost.

Articulation agreements

The Navy has established relationships with many community colleges in the past for a variety of reasons, particularly for contract training on naval facilities and for facilitating the assignment of college credit for naval training. For instance, many community colleges have a Servicemembers Opportunity Colleges - Navy (SOCNAV) office on campus.

Some colleges have also worked closely with local commands to promote postsecondary education for sailors. For instance, Tidewater Community College in Norfolk, Virginia, has a satellite office on the

8. The NCF is currently \$40,000.

Norfolk Naval Station and offers courses on base. Sailors may enroll in traditional 16-week courses or accelerated 8-week courses that accommodate sailors who are frequently on deployment.

The Trident Training Facility (TRITRAFAC) in Bangor, Washington, has created a partnership with Olympic College to provide opportunities for sailors to earn ATA degrees in Marine Systems Technology. A sailor can earn a 2-year vocational certificate of completion at TRITRAFAC, and then complete general education courses through Olympic College to earn the ATA degree. And Thomas Nelson Community College in Hampton, Virginia, offers an AAS degree in opticianry that is open only to graduates of the Naval Ophthalmic Support and Training Activity (NOSTRA) at the Naval Weapons Station in Yorktown, Virginia.

But partnerships or articulation agreements between colleges and Navy *recruiting* do not exist. In the spring of 1997, NRD Philadelphia negotiated an articulation agreement with Ocean County College in New Jersey. The purpose of the agreement is "to enable qualified graduates from specific Ocean County College programs to enter the United States Navy Advanced Technical Field Program or Advanced Hospital Corpsman Program."⁹ The agreement stipulates that the college's responsibilities include preparation of students in specific majors,¹⁰ promulgation of students' opportunities with the Navy in these programs, and maintenance of the college's accreditation status. The Navy, in turn, must do the following:

- Administer the Armed Services Vocational Aptitude Battery (ASVAB) to prospective students.
- Provide strong scientific and technical training in subjects relating to the nuclear field.
- Provide other enlistment incentives as specified for the nuclear enlisted programs.

9. A copy of the articulation agreement is on the CNRC headquarters web site: ntserv.nrc.navy.mil/showcase/articul.pdf.

10. Civil Engineering Technology, Computer Science, Electronic Engineering Technology, Engineering, Fire Science, Chemistry, and Medical Laboratory Technology.

The agreement also allows for both individual and joint publication of the programs.

An articulation agreement such as this serves a few functions. First, it requires that college administrators and recruiting representatives meet and begin communicating. This helps increase awareness of personnel on campus that the Navy is an employer with constant openings. It also provides an opportunity for recruiting personnel to become acquainted with the college.

The agreement itself can ease the recruiting effort tremendously. It can stipulate the type and frequency of recruiter activity on campus and facilitate logistics involved. For instance, it would be helpful if the agreement allowed for:

- The provision of student name lists, including the level of detail required, each semester
- Monthly or biweekly recruiter visits to the student union
- Presentations to certain classes
- Access to job fairs
- Periodic posting of job announcements or other recruiting literature around campus and in the placement office.

All NRDs are aware of the Ocean County articulation agreement, but we recommend that CNRC personnel use this agreement as a blueprint for future agreements. CNRC should then urge all NRDs to pursue agreements with all of their community colleges.

CNRC intranet showcase

CNRC has been working on developing an intranet to improve communications and support of all of Navy recruiting. An intranet is a private network, typically featuring access to online document libraries, databases, and communications—all using internet browser interfaces.¹¹

11. Reference [7] has more information on the intranet server.

The intranet will include downloadable forms, messages from CNRC, electronic versions of recruiting magazines, technical help for such packages as Recruiter Tools (RTOOLS), electronic manuals, electronic forms for ordering supplies, staff phone and e-mail directories, and downloadable Recruiting Advertising Devices (RADs). Plans also include a separate area within the site for assisting the recruiter in community college recruiting. Some of the items planned for inclusion are community-college-specific RADs, school folders developed specifically for community colleges, information pertaining to special enlistment incentives for college students, and sample articulation agreements for partnering with community colleges.

Advanced Programs Outreach Teams

In May, CNRC directed the field to establish Advanced Programs Outreach Teams (APOTs). These teams are an extension of the Outreach Team concept that CNRC recommended to the field for the original community college recruiting initiatives. But the APOT is an expansion of this team to address the desire of the Chief of Naval Personnel to use community colleges and the Baccalaureate Degree Completion Program (BDCP) as bases for minority recruiting. The APOT is an NRD-level team that comprises an Education Specialist (EDSPEC), Enlisted Programs Officer (EPO), Chief Recruiter (CR), Leads Tracking Center Supervisor, Recruiter in Charge (RINC), and Officer Programs Officer (OPO).

The inclusion of an OPO underscores the seamless nature of recruiting. Both enlisted and officer recruiters can benefit from the community college. For the officer recruiter, there are many qualified candidates for such programs as the BDCP. Also, many community college graduates will enroll in a 4-year college immediately upon graduation. The enlisted recruiter benefits by working with the OPO in much the same way. The OPO can pass along leads from the 4-year college who are not qualified to become officers but are qualified for the enlisted ranks. Because an officer recruiter is comfortable with the college environment, the officer and enlisted recruiters can make joint visits to the community college campus, thereby reducing the enlisted recruiter's reluctance to enter this market.

The instructions accompanying the memorandum announcing the formation of these teams provide a detailed list of activities for each member of the team. It is comprehensive and, if followed, should enable each NRD to successfully break into the community college market. Many of the activities are similar to those that we have recommended in previous research on community college recruiting [1, 2]. We want to emphasize two of the recommendations here: job fairs and tuition assistance for recruiters.

Job fairs

Most community colleges sponsor at least one job fair during the academic year, and many offer two (or more). Sometimes these fairs are open to the general public, but only after the student body has had exclusive access. These fairs are opportunities for employers to have access to possibly thousands of graduating seniors, and to people from the community who are actively seeking employment.

This spring, we called several community colleges¹² in the Washington, DC, area to enquire about their job fairs. In general, we found that the cost to an employer was minimal (often under \$100), yet all of the colleges said that the Navy had not participated in a job fair.

Job fairs offer the recruiter access to a unique and potentially rewarding group of people. For instance, almost every civilian attending a job fair is in the work-force category. Recruiters need to take advantage of this market, particularly because work-force people are able to ship directly, if necessary. At a community college job fair, a recruiter has access to *hundreds of high-quality*¹³ *work-force* people who are *actively seeking employment*. This is also often a rich source of high-quality minority recruits. Job fairs offered in late October or early November are particularly important for recruiters trying to meet goals in the difficult-to-fill months.

12. We called Montgomery Community College, Dundalk Community College, and Northern Virginia Community College.

13. We define quality as High School Degree Graduates (HSDGs) who score in the upper AFQT category. Community college graduates have higher AFQT scores than even high school graduates, and all are HSDGs [1].

To help recruiters gain access to these job fairs, we recommend that CNRC write to the placement director of every community college requesting the details (including applications) for all job fairs for the academic year, including those that are field specific (such as for allied health graduates). Alternatively, NRDs could prepare letters (based on a prototype) to send to all of their colleges (both 2-year and 4-year).

Tuition assistance for recruiters

Many enlisted recruiters are reluctant to recruit on a community college campus because they are unfamiliar with that environment. One way to increase their comfort level, as well as to increase Navy awareness on campus, is for NRD COs to encourage every enlisted recruiter to take advantage of tuition assistance and take a course on campus. Sailors should take courses during the working day, when it is more likely that full-time students of a recruitable age will be attending, and they should attend in uniform. Typically, a course meets three hours per week, so it is not a large time commitment. And, while the recruiter is on campus, he or she can visit the placement center and refresh RADs, verify that posters are still in place, eat lunch in the cafeteria (where hundreds of students gather), or set up an information table outside the student union.

Many NRD COs already allow this, and some even encourage the practice. However, it is not universal. Many COs feel that such activity detracts from recruiter productivity and that recruiters should take classes only after hours. By being on campus on a regular basis, however, the recruiter learns more about how students find jobs, hears about career and job opportunity events (such as job fairs), and increases Navy awareness.

For many recruiters, a single semester would assuage any fears they have of a college campus. Given the difficult challenges recruiters currently face, however, even 3 hours per week to attend classes may be difficult, particularly because the rewards to this type of investment are not realized in the short run. Perhaps not until more resources are made available to recruiting will this be possible on a larger scale.

Recruiter visibility on campus has one other benefit. Recruiting is a difficult job, and CNRC is trying to increase its career recruiting force. Allowing sailors to attend community colleges during the day could be used as a way of rewarding recruiters and as an incentive to those who otherwise might not choose to remain on recruiting duty. And, the Navy benefits by having more educated sailors, regardless of whether they remain in recruiting or go back to the fleet.

Other efforts

Other FY 97 recruiting initiatives aimed at the community college market follow:

- CNRC developed six program-specific posters for engineering technicians, electronics technicians, computer technicians, communications, health care professionals, and foreign language specialists. Distribution to the field occurred in late April 1997.
- A poster advertising job opportunities for 2-year-college graduates was first distributed to the field in October 1996.
- Publication of a monthly community college newsletter for NRD personnel began.
- The Recruiter Incentive System awards points for recruits with Associate or Bachelor's degrees.¹⁴ However, points are awarded to recruiting teams rather than to individual recruiters.

Factors outside Navy recruiting

Other FY 97 initiatives have direct impact on the ability of recruiters to recruit from the community college market, but they are outside the purview of Navy recruiting.

14. The system awards points as follows: 1 point for a basic contract, 1 point for AFQT category I & II, 3 points for nuclear field, 2 points for work force, 3 points for minority AFQT category I-III A, 1 point for Associate or Bachelor's degree, and 4 times the total points awarded if the recruit ships or 5 times if the recruit graduates from RTC (COMNAVCRUIT-COMINST 1650.27, 5 September 1997).

Military recruiter access to campus law

In FY 97, House Report 104-863 made provisions for the "Denial of Funds for Preventing Federal Military Recruiting on Campus" [section 514]. This law specifies that postsecondary institutions that do not allow military recruiters access to their campus and students or to information pertaining to their students (including names, addresses, telephone listings, ages, levels of education, and majors) will be denied funds made available in the Departments of Labor, Health and Human Services, Education, and Related Agencies Appropriations Act.

This law can benefit Navy recruiting tremendously. CNRC's Code 80 reported during FY 97 that it was having difficulty obtaining name lists of community college students. Most colleges routinely refuse to make name lists available (presumably to protect their students from unwanted solicitations).

By referencing this law, recruiting personnel should now be able to obtain college name lists—for both 2-year and 4-year colleges—from a majority of colleges. However, we do not know whether the awareness or use of this law is widespread in Navy recruiting.¹⁵

Equally important is what the recruiter, the NRD leads tracking center, or headquarters does with the name lists. Code 80 produces numerous national direct mail campaigns every year, many of which are program specific. So, for instance, a direct mailing to likely candidates for the enlisted nuclear program could include these names. In addition, requesting the inclusion of academic majors, ages, and GPAs with the name lists could facilitate the identification of eligible people.

15. We do know that NRDs Los Angeles and Philadelphia have obtained community college name lists by referencing this law, and that San Francisco has had difficulty obtaining lists, even after referencing this law. The potential also exists for a college to provide access to campus and name lists to only one service because the law does not stipulate access to *all* services.

A major benefit of college name lists is the identification of college graduates and dropouts. Recruiters could request lists for both semesters. Names that do not appear on two lists in a row (fall and spring, spring and fall) are either graduates or dropouts, both of which may be actively seeking employment.

To maintain the cooperation of college administrators, recruiters must avoid the perception that they are trying to entice students to drop out in order to join the Navy. Placement of college graduates in the Navy is of benefit to the college—because it increases their placement rate—but losing tuition-paying students to the Navy is not.

Hope Scholarship

President Clinton made expanded educational opportunity a cornerstone of his budget and middle class tax relief during 1997. President Clinton's vision is to "make 14 years of education—at least 2 years of college—the standard for all Americans" [8].

To that end, the Balanced Budget Act of 1997 and the Taxpayer Relief Act of 1997 contain several provisions for making college more affordable, such as the Hope Scholarship, student loan interest deductions, and education IRAs. Of these, the Hope Scholarship will most likely have the greatest impact on the enrollment of community colleges. It is actually a tax credit for eligible students during their first 2 years of postsecondary education. The tax credit covers 100 percent of up to \$1,000 in tuition and fees, and 50 percent of the second \$1,000. The tax credit will be in effect for expenses paid after 31 December 1997.

How will this affect community college enrollment? The Department of Education estimates that the Hope Scholarship will cover up to 88 percent of the national average full-time tuition and fees at community colleges and that, when fully phased in, 5.8 million people will claim the Hope Scholarship yearly [9].

Most likely, many of these people will be recent high school graduates who might otherwise not have gone to college, causing a further reduction in the high school recruiting market.

American Association of Community Colleges

The American Association of Community Colleges (AACC) is "the primary advocacy organization for the nation's 1,100 2-year degree-granting institutions" [10]. They provide such services as legislative advocacy, monitoring of national trends, and data analyses and dissemination.

In the fall of 1996, the AACC and the U.S. Department of Labor announced an agreement in which the 1,100 community colleges that AACC represents would become internet "access zones" for America's Job Bank [10]. As a result, community college students will have access to this free job posting site, where the Navy currently advertises jobs. For community colleges that agree, job seekers in the local community will also have access.

The AACC also sponsors the annual Parnell Award for three community colleges for outstanding achievement in development and implementation of Tech Prep partnerships. Tech Prep is related to the School-to-Work Opportunities Act the Federal Government is using to strengthen vocational education in the United States. We have suggested that the Navy look into becoming Tech Prep partners with community colleges in order to form more mutually beneficial relationships [2]. We have investigated in more detail the types of Tech Prep partnerships that currently exist and how the Navy could form partnerships. A report of these findings is now available [11].

We recommend that CNRC establish a relationship with AACC, to use it as a conduit for forming better relationships with community colleges. For instance, the AACC disseminates a newsletter to all of its member colleges. It may be possible to include a feature article about the Navy in one of these editions. AACC may also be able to assist the Navy in developing Tech Prep partnerships.

A very important part of AACC's activities is its annual conference. CNRC could probably benefit in a number of ways by participation in this event. More than 2,500 people attended the 1997 convention (at least 570 CEOs and another 1,000 or so college administrators). Exhibitors at this conference included academic institutions, such as Palomar College; institutions that support academics, such as The

Chronicle of Higher Education and the National Community College Hispanic Council; corporations, such as Honeywell and Spectrum Industries; and two representatives from the military—Servicemembers Opportunity Colleges and *U.S. Army Recruiting Command*. No other military service was represented [10].

Participation in this conference could provide the opportunity to meet with representatives from other colleges and other college advocacy groups (such as the National Council of Independent Junior Colleges or the National Council of State Directors of Community Colleges). It might also be advantageous for the Navy to make a presentation in one of the many forums, such as those pertaining to a Tech Prep or other business/college partnerships, or those related to a forum from last year's conference, "Working Together for Employment and Training Services." CNRC might also benefit by attending some of the forums pertaining to trends in college enrollments, information transfer, college consortia, and so on. Finally, CNRC could increase awareness of employment opportunities for community college graduates with key college administrators by participating as an exhibitor.

FY 98 initiatives

In this section, we highlight just two activities that are occurring in FY 98 in the community college recruiting efforts.

CD-ROM

A field survey in late March 1997 solicited priorities for the CNRC intranet server. Interactive multimedia was among the top five choices; at the time, however, none existed for recruiters. We believe that there is a real need for such a recruiting tool, especially for the community college market. An interactive computer display could be very useful in attracting students to a recruiter's booth at a job fair or to a table set up outside a college union. (A presentation running in the background to draw attention could have clickable sections for accessing information of interest to the prospective recruit.) And such a tool could help present the image of the Navy as a high-tech service.

CNA is working on a prototype interactive CD-ROM for the community college market. We have proposed to market test it with the Boston recruiting zone in the New England NRD, which has been chosen for an NPRDC Research and Development project on Computer Communications Technology for Recruiting. For more information on the content of the CD-ROM, see [7].

Partnership with Florida Community College

NRD Jacksonville is working with the Florida Community College at Jacksonville (FCCJ) on a partnership that has the potential to benefit both Navy recruiting and training.

NRD Jacksonville is investigating the possibility of FCCJ offering some Navy-tailored degrees in naval engineering technologies that could reduce or eliminate training for graduates enlisting in the nuclear

field or possibly some other enlisted technical field (such as AECF). This is based on the Tech Prep model, whereby the community college recruits area high school students for the program. The students prepare by taking the appropriate high school courses beginning in their junior year. The college wins by being able to sell a high-tech major that attracts more students. In addition, FCCJ benefits because the State of Florida requires that community colleges provide performance-based education programs to the communities they serve in order to place them in high-skilled jobs. And the Navy wins by having access to highly trained people who can save thousands of dollars in training costs.

This type of partnership would benefit CNRC tremendously in recruiting pretrained people. In a later section, we will discuss current and planned efforts at targeted recruiting of pretrained community college graduates.

Advertising recommendations

In addition to the recommendations already provided in the preceding sections, we believe that CNRC could take a number of actions to enhance recruiting in the community college market. We have made some of these recommendations in previous publications [1, 2, 6, 12], but they warrant reiteration.

RADs

Headquarters personnel have received feedback from the field that the community-college-specific poster is very popular, and they continue to receive requests for more posters or for new RADs for this market.¹⁶ RADs that emphasize the Navy's commitment to education may be particularly appropriate for this market. A RAD that focuses on the education benefits offered, such as the College Loan Repayment, Navy College Fund, Montgomery GI Bill, and Tuition Assistance, might be useful if placed in a college placement office or used in job fairs or other visits to the college campus.

16. Personal conversations with CNRC Code 524.

In addition, we recommend including the College Loan Repayment option in all publications for which recruits are eligible.

Internet

Navy recruiting can enhance community college recruiting via the Internet in two ways: through advertising and resume bank searches.

Many job posting sites on the Internet are either free or relatively inexpensive for employers. The Navy has been advertising on America's Job Bank (AJB) since March 1996. In 9 months, the Navy jobs received almost 200,000 "hits."¹⁷ However, we feel that this site is not being fully utilized. As we stated earlier, community colleges have agreed to become Internet Access Zones for AJB. It seems reasonable then, that a majority of graduating students will be visiting this site in their job search. In addition, a majority of states have their own AJB-affiliated sites. These sites look very similar to AJB, but contain postings only for that particular state. For most of these states, jobs that are posted on AJB are automatically posted to the state site, and vice versa.

Therefore, the Navy should post more jobs on AJB and reconsider how it advertises current jobs. For instance, current jobs targeted at potential candidates for the enlisted nuclear program are titled "Nuclear Engineering Technician." The descriptive "nuclear" may be excluding otherwise eligible recruits, particularly since very few community colleges offer a nuclear technology curriculum. Perhaps more generic job titles, such as "engineering technician," or those that use a keyword in the title that encompasses the types of college majors, such as science or mathematics, would be more effective. In addition, the Navy is not making use of other job posting sites that are free, such as *www.headhunter.net*.

Numerous sites for graduates in particular fields (e.g., engineering, medical fields) that offer professional services, such as information

17. Every time an ad is accessed, it registers as a "hit." An ad could be accessed multiple times by the same person, or a person could access multiple ads. See [1] for a breakdown of hits by job.

about graduate education and seminars, also offer a job posting service. For instance, the Institute for Electrical and Electronics Engineering (IEEE) has a web site that caters to the members of the professional organization. IEEE states that it routinely informs its 310,000 members of the job listing service, and that the job postings receive 25,000 queries each month [13]. The fees for posting are very low—\$25 per month for the first region, and \$15 for each additional region. (The country is divided into six regions.) The cost to enter one job in the entry-level posting is \$15 per month.

There are also many sites that are free to advertisers. For instance, *www.engineeringjobs.com* is devoted solely to the listing of career information and job postings.

The Navy should be taking full advantage of these sites. Some offer the opportunity for employer profiles, free or relatively inexpensive job postings, or hot links to employers' web sites. The identification and maintenance of jobs on these sites requires a significant investment in terms of personnel time, but the potential for returns is great.

Even sites that are fairly expensive may be cost-effective. And sites that may be popular with high school students may not be the sites that community college graduates are using. We recommend that CNRC devote some efforts to identifying and analyzing the cost-effectiveness of the best sites for the community college market.

CNRC has recently started a virtual recruiting district within headquarters, in which one career recruiter is responsible for (among other things) searching resume banks on the Internet. Many colleges that are on the Internet have student resume posting sections within their sites. These sites are not always easy to find, and the status of these sites can change frequently. For instance, resumes can be added or deleted, and new colleges are continually adding this employment service to their web sites. Searching these sites is a massive undertaking, not only in terms of identifying the sites, but also in terms of sifting through the resumes for potential recruits. And both 2-year and 4-year colleges have these sites, so the candidates could be eligible for both enlisted and officer programs. Thus, it might be best to delegate

the task of searching for new resume sites and new resumes to leads personnel at the NRD level.

Recruiter Qualifications Standards

The Recruiter Qualifications Standards (RQS), which include requirements for all new recruiters, should include a mandatory visit to the community colleges covered by their station. The long-term effect would be that every Recruiter in Charge (RINC), Zone Supervisor, and Chief Recruiter would have visited a community college. Currently, many of these enlisted recruiting leaders do not have exposure to college campuses, so it is difficult for them to promote it as a viable market. Without the full support of these people, the field recruiter will find it difficult to break into this market.

CNRC conferences

CNRC headquarters frequently holds conferences for recruiting leadership, such as for Area COs, NRD COs, and Chief Recruiters. The community college market should be encouraged at *each* of these conferences. These people should have the opportunity to provide feedback to headquarters on their attempts in this market, including what works, what doesn't, and how headquarters can best serve them.

Dr. Busky's handbook

We advise updating *The Community College Handbook* by Dr. Busky and making it available to the field, either in printed form or in electronic form on the intranet server.

Pretrained HMs and electronics technicians

Background on recruiting pretrained HMs

We have periodically documented the progress of the efforts to recruit pretrained Hospital Corpsmen (HMs), which began as an experiment in February 1996 [2] and was expanded in FY 97 [1]. From the beginning, the experiment has involved 29 recruits. We will summarize the characteristics of these recruits, as well as their performance. But, first, we provide a brief summary of the history of this initiative.

The original experiment began with two NECs: 8452 (Advanced X-ray Technician—civilians are called radiographers) and 8506 (Advanced Medical Laboratory Technician). These were the only two NECs targeted for the remainder of FY 96. In FY 97, three NECs were added: NEC 8482, Pharmacy Technician; NEC 8483, Surgical Technologist; and NEC 8708, Dental Hygienist (a specialization within the Dental Technician (DT) rating).

Under the initiative, people with Associate degrees¹⁸ in one of these fields are accessed as E3s (anyone with 45 semester hours of college credit are eligible for E3), attend boot camp and HM A-school, and then are awarded the appropriate NEC.

General characteristics of HMs

The appendix contains a complete list of recruits by recruiting station ID, date of enlistment, date of reservation, education, gender, NEC,

18. A certificate is acceptable for radiographers, surgical technologists, and pharmacy technicians. A certificate typically involves the same number of college credits in the discipline, but it does not require liberal arts core courses.

AFQT, and first fleet assignment. A summary of the general characteristics of these recruits follows:

- There are 9 clinical lab technician—5 men and 4 women.
- There are 20 radiographers—14 men and 6 women.
- No one has been recruited for the three NECs added in FY 97.
- The average AFQT is 74, and 82.8 percent are in AFQT Categories I–IIIA.
- The recruits hold Bachelor's degrees (17.2 percent) and Associate degrees (44.8 percent).
- Eighteen are currently in the fleet, serving in all types of assignments, including overseas (Japan and Spain), with the Marine Corps, and in clinics and hospitals.
- There are no recruits currently in DEP.
- Area 1 (the northeast) has accounted for 14 of the 29 contracts, Area 3 (southeast) for 7, Area 5 (midwest) for 5, and Area 8 (west coast) for 3.

How have they performed in terms of attrition? Of the 29 recruits, there have been:

- Four cases of DEP attrition (13.8 percent)
- No cases of boot camp attrition
- No cases of A-school attrition
- Two cases of fleet attrition.

Although the population is small, its performance has been far above that of the overall Navy.¹⁹ For instance:

- Their 0-percent A-school attrition compares to 6-percent and 9-percent A-school attrition for San Diego and Great Lakes, respectively, for all other HM recruits.²⁰

19. Because their numbers are so small, it is not possible to conclude whether any differences that exist are statistically significant.

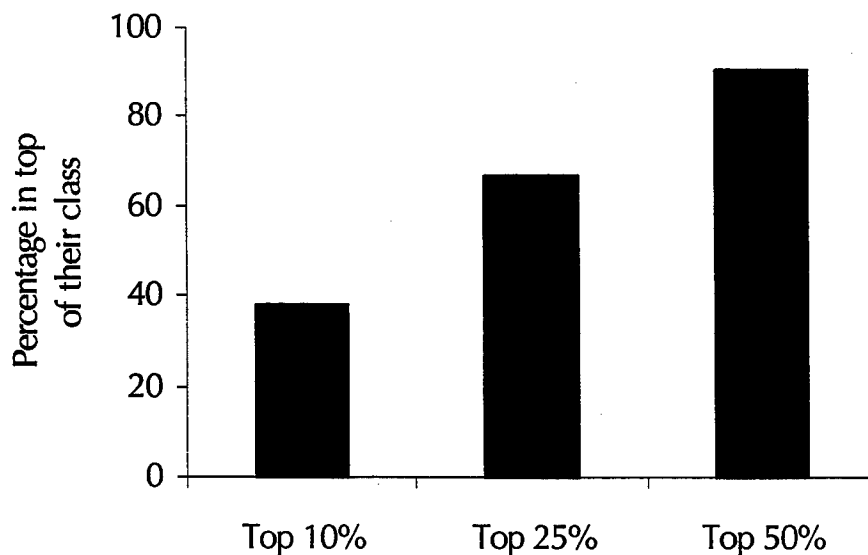
20. Enlisted Medical Community Manager, N132D13, provided the data.

- Their 9.5-percent 9-month attrition (2 of 21 people who were accessed at least 9 months ago have attrited) is well below the all-Navy rate of about 17 percent for FY 96 accessions.²¹

And, finally, how have they performed academically in A-school? To date, 21 of the 29 have completed A-school. The average Grade Point Average (GPA) for these graduates is 94.2 percent.²³ A GPA of 70 percent is required to pass A-school, so these recruits have done very well in an absolute measure.

But how do they perform in A-school compared to non-pretrained recruits? Figure 4 shows that they have performed well in a relative measure as well. Of the 21, 38 percent graduated in the top 10 percent of their class, two-thirds graduated in the top 25 percent, and an overwhelming 90 percent graduated in the top half of their class.²²

Figure 4. Percentage of HM pretrained recruits graduating in the top of their class



21. We used CNA's SCREEN program to calculate the attrition rate.

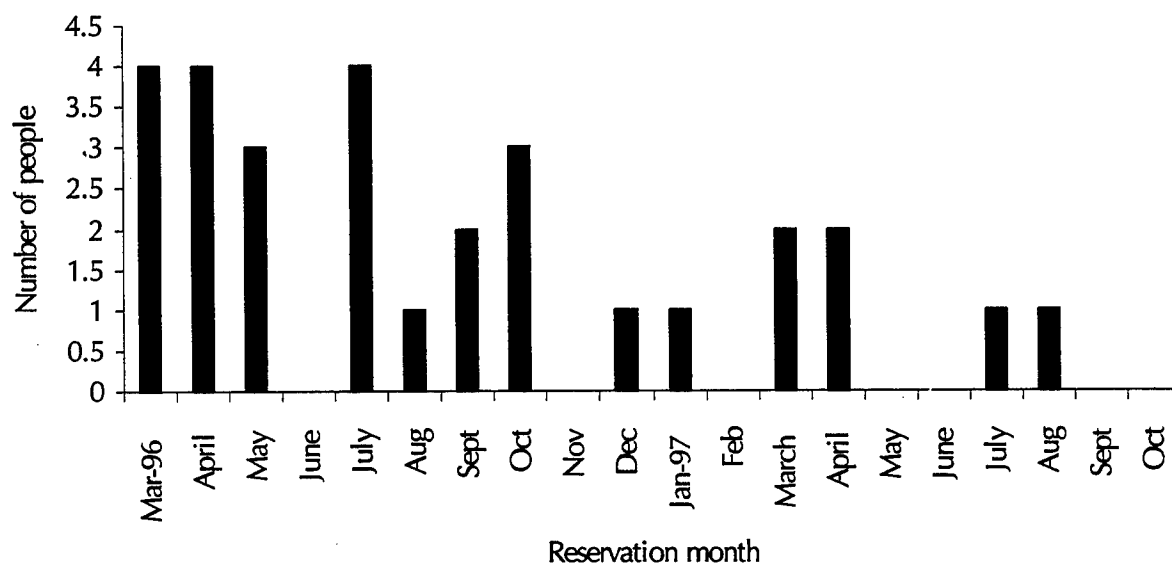
22. For comparison, only 10 percent of all graduates graduate in the top 10 percent, 25 percent in the top 25 percent, and so on.

What worked and what didn't for HMs?

In the original experiment that began in February 1996, CNRC goaled six NRDs²³ to recruit 50 radiographers and 25 clinical lab technicians. At that time, however, the Navy asked the entire field to participate in the program, though without specific goals. In FY 97, the Navy dropped the "experiment" label and urged all recruiters to recruit qualified people from the community college market, as well as to recruit pretrained people in the five HM and DT specialties.

Figure 5 shows the number of reservations by month for all recruits. The difference in the two fiscal years is dramatic. From the inception of the program until October 1996—a period of 8 months—72 percent of the recruits were recruited.²⁴ The remaining 28 percent signed up in the following 12 months. And, as we noted earlier, no one has been recruited for the three NECs added in FY 97.

Figure 5. Number of HMs recruited by month



23. Buffalo, Pittsburgh, Dallas, Houston, San Antonio, and Richmond.

24. Because it usually requires more than 1 month from first contact to recruit an individual, we include contracts in October 1996 with FY 96 results.

Given the differences in the number of people recruited in the two fiscal years, we need to look at how the two methods varied.

In FY 96:

- Recruiters were goaled
 - The 6 goaled NRDs (out of 31) account for 13 of the contracts. Of these, 9 were recruited either in FY 96 or in October 1997.
- CNRC sent letters to the directors of all accredited programs announcing the new recruiting program and asking them to encourage their students to contact a recruiter for more information.
- The Navy posted jobs for all 50 states on AJB.

And what differed in FY 97?

- Navy College Fund was offered for these pretrained recruits.
- Dental hygienists could choose either the Navy College Fund or a \$2,000 enlistment bonus.
- In early May, the field received college posters announcing opportunities for graduates in allied health fields.
- No letters were sent to program directors.
- The jobs on AJB expired because no one extended them in January. Sometime after being reentered in late February and early March, many of these jobs again disappeared. As of 26 October 1997, a complete listing of these jobs on all 50 states did not exist.
- CNRC did not goal recruiters for these recruits.
- Each NRD received a list of community colleges with accredited programs within their jurisdiction.

With such a dramatic decrease in the number of recruits in FY 97, and the failure to recruit anyone in the three additional NECs, it appears that none of the new techniques used in FY 97 was effective. We will briefly discuss each of these.

FY 97 efforts

The Navy College Fund

Only one of the FY 97 recruits took the NCF, and he was ultimately a fleet attrite. The failure of NCF to attract recruits could be the result of some inherent weakness in the package to attract these types of individuals, or possibly recruiters (or classifiers) did not know that this was an enlistment incentive, or, if they knew, they did not use it to sell this program.

Enlistment bonus for dental hygienists

The civilian starting salary for dental hygienists is around \$30,000, which is much higher than for any of the HM specialties. With a regular military compensation (RMC) of approximately \$21,000 for an E3 with less than 2 years of experience, the Navy is unable to compete. However, it would be cost-effective, as we have argued elsewhere [1], to offer a much higher enlistment bonus. Because no C-school exists for dental hygiene, the Navy is currently paying to send active duty sailors to community colleges for 4 semesters for their training. Thus, the cost of student pay and allowance, as well as tuition, is far greater than the cost of, say, a \$10,000 enlistment bonus. It is possible, however, that even a \$10,000 enlistment bonus would not be adequate to attract any dental hygienists.

Posters

The posters advertising opportunities for community college graduates in specific fields, including allied health, went to the field too late to have much, if any, effect on either the May graduates or recruits in general for FY 97. Ideally, these RADs should be made available much earlier in the academic year and "refreshed" in February and March when May graduates are intensifying their job searches.

FY 96 methods

We have suggested some reasons why the FY 97 methods were not effective. But why did the FY 96 methods attract more people?

America's Job Bank and direct mail to faculty

March and April, when most May college graduates are actively seeking employment, were the most productive months for recruiting for this program for both FY 96 and FY 97 (again, assuming that October 1996 reservations were part of FY 96 recruiting efforts). And how would graduates become aware of opportunities in the Navy? Two methods used in FY 96 would have notified them of the opportunities: the letter sent to the program directors, and the presence of the jobs on AJB. We have noted previously the link between AJB and community colleges, so that it seems plausible that some of the recruits may have first learned about the opportunities there. From talking with the program directors at several colleges, we also know that many of them shared the letters with students. In fact, sending letters to program directors may be more effective than sending letters directly to students. Because of the mentoring role that faculty play in college, students often seek employment advice from their professors. Therefore, a faculty recommendation to consider the Navy may have a significant influence.

Thus, one or more of the following factors could account for the fact that the number of recruits in this time frame in FY 96 was larger than in FY 97:

- The letter to directors²⁵
- AJB
- Goaling recruiters
- The possibility that job prospects for these specialties might not have been as good in FY 96 as in FY 97.

We have discussed the first two factors, but did goaling of recruiters account for some of the recruits? In the first 8 months of the experiment, 10 of the 25 non-goaled NRDs, or 40 percent, had at least one recruit. In that same time frame, 4 of the 6 goaled NRDs (Buffalo, Pittsburgh, Richmond, and Dallas), or 67 percent, had at least one recruit.

25. However, the letters would be effective only for those people who were currently in school or for recent graduates who were still in touch with their professors. Unfortunately, we do not know whether the recruits came from a college campus.

However, 5 of the 6 NRDs were chosen because they were in the states with the largest number of graduates for these two specialties (New York, Pennsylvania, and Texas).

Unfortunately, the number of recruits is too small to conduct a more detailed analysis on an NRD level. Nor can we provide any data on the civilian job market. Before the original experiment, we surveyed the program directors of several of these programs and learned that employment prospects were not as good for their graduates as they had been in the past, mostly because of the uncertainty created by the possibility of national health care reform. With the change in the priority of that agenda during the 1996-97 academic year, it is possible that employment prospects did improve, but it is unlikely that they changed drastically in such a short period of time.

Cost-effectiveness

We have stated that the FY 96 methods seemed to work better than those used in FY 97. But two questions remain:

- Were these methods cost-effective?
- Do other methods exist that weren't used but that might also be cost-effective?

We want to know whether recruiting the 21 contracts in FY 96 was worth the cost. We can address this issue in a number of ways. First, if we use a programming rate of about \$35,000 per sailor, the 19 sailors from this group who ultimately accessed saved at least \$665,000 in student pay and allowance.²⁶ If we factor in the cost of equipment, student materials, wear and tear on machinery, and so on, the savings are greater. Certainly, the additional cost of recruiting these 21 was much lower than this total. But what are these costs?

First, there are the net costs to the recruiter. The DEP attrition of the 21 recruits was 9.5 percent, well below the 16.4 percent for overall Navy in FY 96.²⁷ Their 0-percent boot camp attrition compares very favorably with the figure for overall Navy of 12.5 percent for FY 96

26. The C-schools for the two NECs are about 52 weeks in length.

27. Data are from the September 1996 Monthly Recruiting Brief to CNP.

[14]. For a recruiter, attrition is costly because higher attrition results in a higher monthly goal.

It may take more time, and therefore cost more, to recruit certain types of people. Goaled recruiters cannot choose to avoid these types of recruits and pursue only those who take less time. So, goaling recruiters incurs an opportunity cost. In other words, if a recruiter is goaled to recruit a particular type of recruit, the time spent in target marketing is less time that can be spent on other, more generic recruiting. Unfortunately, we have no data to assess the absolute or relative time it took to recruit these people.²⁸

And what was the cost to Recruiting Command for the FY 96 efforts? It costs nothing to advertise on AJB. However, it does cost in terms of manpower to input the jobs (only necessary one time, and one ad can be input in less than 2 hours) and to update them every month (updating requires less than 30 minutes per ad).

In terms of letters to program directors, the cost should be fairly minimal. Organizations, such as Peterson's, will sell institutions name lists of college personnel, including postal and e-mail addresses. We received an estimate of a few thousand dollars from Peterson's for a list containing the names of directors in a dozen or so majors, plus placement directors and registrars. There are about 1,000 accredited programs in radiography and clinical lab technician in the country [15]. If it costs \$1, on average, to send a letter (allowing for postage, copying, and materials), a mailing to all program directors for the two NECs could cost less than \$5,000, including the cost of the mailing list. This has the potential of being a very cost-effective method, even if only a few contracts result.

Thus, the net costs of these recruits were greatest for the goaled recruiter, but DOD's Defense Health Program (DHP), which funds HM training, reaped the greatest net benefits.

28. However, looking at the information in the appendix, it seems likely that some of the recruits required little recruiter time. Within the first month of the pilot program, there were four recruits, and two of these signed up from the same station on the same day.

What other methods might work?

We have argued elsewhere [1] that a number of enlistment incentives have the potential for being cost-effective for recruiting these pre-trained people. For instance, an enlistment bonus (EB) has never been offered for the HM pretrained recruits, and it appears that the EB for the dental hygienists was too low. The civilian starting salary for the HM specialties is within a few thousand dollars of the RMC for an E3, so a small EB may be all that is required.

We believe that these graduates should be eligible for the College Loan Repayment. Even if a recruit has \$10,000 in college loans (currently the cap on CLR), the savings exceed this cost.

We have also suggested that offering advanced paygrade to E4 on accession might be a cost-effective incentive.

HM lessons learned

The recruitment of pretrained people in these five specialties continues in FY 98. Although we would need more data to provide additional recommendations, based on results from previous efforts, we offer the following recommendations for recruiting pretrained HMs and DTs for FY 98:

- Send a letter to program directors of all of these accredited programs.
- Ensure that AJB jobs are current for FY 98.
- Increase the EB for dental hygienists significantly (say, to \$10,000).
- Broaden College Loan Repayment to include these pretrained recruits.
- Offer a small enlistment bonus to pretrained HMs (\$1,000 to \$2,000).

This experiment has provided valuable lessons, both for headquarters and for the field, in terms of target marketing. The HM rating is not critically undermanned, and recruiters do not have a difficult time recruiting for this rating. However, the Navy would like to recruit other types of pretrained people.

Recruiting pretrained electronics technicians

Background

In a recent CNA study, we investigated the potential for using community colleges to outsource a variety of Navy training, including the core curriculum for the Advanced Electronics/Computing Field (AECF) program [16]. Our study took us to Tidewater Community College and Thomas Nelson Community College, both in the Norfolk, VA, area. CNET personnel evaluated their curricula in electronics and electronics engineering technology, and found significant overlap between their curricula and the AECF core fundamentals. They had reached a similar conclusion after looking at the electronics curricula of several community colleges in Oregon.

Why is there interest in recruiting pretrained people for the AECF program? The AECF technical core is 19 weeks long. NETPDTC estimates the cost, net of pay and allowances, to be about \$15,000 per graduate.²⁹ Using a programming rate of about \$25,000,³⁰ the 19 weeks cost an additional \$10,000 in compensation.

But this training involves other costs. The AECF course has a yearly throughput of about 2,500 sailors,³¹ but the actual requirements are higher.³² CNRC has trouble recruiting enough people for this program because of the high ASVAB requirements. In addition, seasonal variations in accessions cause large backlogs. In FY 1996, backlogs cost 118 man-years Awaiting Instruction (AI).³³ Using a \$25,000 yearly compensation cost per person, that equates to a total annual cost of nearly \$3 million.

29. NETPDTC costs do not include all claimant costs, such as the cost to train instructors.

30. These are estimates only. We use \$25,000 vice \$35,000 because these sailors are mostly E1s or E2s with no dependents.

31. Data are from NITRAS Student Master File.

32. In FY 96, recruiters achieved only 75.9 percent of the AECF goal of 3,140. (CNRC September 1996 Monthly Recruiting Brief to CNP).

33. The days awaiting instruction due to backlog are from the NITRAS Training Summary File.

Thus, recruiting enough pretrained people in electronics who are qualified to skip the core fundamentals would result in significant savings.

Assessing qualifications

Recruiting pretrained people for the HM rating is relatively straightforward because the NECs chosen have direct overlap with civilian training. Many Navy HM C-schools are accredited by civilian accrediting bodies—the same bodies that accredit the community college curricula. This is not the case in most nonmedical fields, including electronics. Depending on the field, however, occupation standards do exist.

The major concerns in recruiting pretrained are the absence of a standardized test of competency and the fact that pretrained people have less military experience upon entering the fleet. As stated earlier, from looking at electronics-related curricula at Northern Virginia Community College, Tidewater Community College, Thomas Nelson Community College, and several community colleges in the State of Oregon, many programs appear to have significant overlap.

But it would be a daunting task to evaluate the curricula of all 877 electronics-related programs that exist in community colleges across the country. There are (at least) two other options for assessing competencies. The first is to develop “challenge exams” to evaluate whether a recruit has enough training to eliminate some or all of the technical core fundamentals. The final exam given for the core course is one possibility.

The second option builds on the HM model: recruit only from institutions that follow a certain standard for the curriculum, and eliminate the need for challenge exams entirely. Such standards exist for electronics. In 1994, a joint project of the Electronic Industries Association and the Electronic Industries Foundation developed skill standards to “measure and promote the competency of work-ready, entry-level U.S. electronics technicians” [17]. These standards are intended to prepare a person to enter the workforce, with minimal additional specialized training, in any 1 of 11 specialty occupations.

CNET personnel would need to examine the skills standards and determine whether they are adequate to meet the needs of the technical core fundamentals. If they are, the Navy needs to identify colleges that follow these standards and target them for recruiting.

A more ideal arrangement would be to create more community college partnerships like the one described between NRD Jacksonville and Florida Community College at Jacksonville. For graduates of these programs, the Navy is assured of the overlap in curriculum. And, the partnership facilitates recruitment of these people.

Incentives for electronics graduates

The electronics field has an extensive network of community colleges. According to *Peterson's Guide*, 565 community colleges teach electronics technology and 312 teach electronics engineering technology [18]. The Bureau of Labor Statistics predicts that, through the year 2005, job growth for electronic equipment repairers will decline, and job growth for engineering technicians will grow more slowly than average [17]. In 1993, beginning maintenance electronics technicians had median earnings of \$10.75 per hour (about \$22,000 per year). The median salary for the most junior engineering technicians was \$16,590 [19].

Thus, the flow of graduates appears to be adequate, and the job market for recent graduates may be relatively tight. Under existing programs, recruits with 45 semester hours of credit (AAS degrees are at least that many credits) are eligible for enlistment at the E-3 level. In FY 1997, the Regular Military Compensation (RMC) for an E-3 with less than 2 years of experience was \$20,681.³⁴ Thus, the starting salary in the Navy is a bit lower than that for civilians. However, the AECF program also offers a generous enlistment bonus during off-peak recruiting months (usually October through May), which in FY 1997 had been as high as \$8,000. Also, recruits into the AECF program are eligible for the College Loan Repayment outlined previ-

34. RMC combines basic pay, Basic Allowance for Quarters, Basic Allowance for Subsistence, average Variable Housing Allowance, and the tax advantage from untaxed allowances.

ously. So, the only additional incentive that a pretrained college graduate entering the AECF program has is advanced paygrade. Whether this is enough to attract enough qualified people is uncertain. Other incentives could be introduced, including accession at E4 vice E3. The RMC for an E4 with less than 2 years of experience in FY 1997 was \$22,159.

Recommendations

Because so many community colleges offer programs in electronics-related fields, recruiters should have access to these graduates in large numbers if they are actively recruiting on campus. We offer the following additional recommendations for this target market. Recruiters could:

- Make presentations to these graduates
- Display posters designed for electronics and engineering technicians.

In addition, CNRC could:

- Send letters to all program directors in these fields
- Place ads on Internet job posting sites.

The larger picture

CNA has worked closely with CNRC and personnel in N13 since the original HM experiment first began. In addition to the recommendations that we have made in this section concerning techniques to recruit pretrained people, we would add the following observation. Recruiting involves many different types of Navy personnel: the recruiter on the street, the RINC, the Chief Recruiter, the NRD CO, the Area CO, CNRC headquarters, the Bureau of Personnel, and many other people in between. For success, all of the people involved must be fully convinced of the importance of recruiting pretrained, especially because it requires special incentives for both recruits and recruiters.

But involvement does not end with the Bureau of Personnel. Savings in training costs also affect CNET. And, ultimately, it is the resource sponsor who benefits most, with more comprehensively trained, more mature sailors with lower attrition who are in the fleet sooner at a much lower cost. Because of the inflexibility in Navy funding, the people paying the additional cost to recruit pretrained people are not the same ones who reap the benefits.

To ensure success, all commands involved should actively participate in this process, with support at the highest levels. Navy leadership needs to make clear the importance of these types of recruits because they represent the potential for significant savings.

Recommendations

Community colleges have become increasingly more important to the Navy, both for the potential recruits they produce and for the role they are taking in providing tailor-made training to the communities that they serve.

Yet, in spite of Navy recruiting's efforts in the past year, the number of recruits from community colleges has not increased significantly. Changing old paradigms takes time, however, and there is evidence of an increase in activities in the field on community college campuses. For instance, the past year has seen more creative proposals for partnerships with community colleges and the Navy, both for training and recruiting purposes. But the Navy needs to do more to facilitate recruiters' access to community college campuses. Tech Prep is just one such vehicle for these partnerships. The proposal for a Tech Prep partnership being developed with NRD Jacksonville and the Florida Community College at Jacksonville might become a prototype for hundreds of partnerships across the country.

But in the current recruiting environment, recruiters have little or no time to explore new markets; they are hard-pressed just to make mission. It appears that more resources are needed for the general recruiting effort and possibly a further increase to expand community college recruiting. At present, there is little understanding about the relative cost of community college and high school recruiting. It would not be surprising if community college recruiting, particularly during a transition period, were more expensive than high school recruiting. Of course, the payoff for these recruits is lower training costs and lower future recruiting goals because of lower attrition.

Once adequate funding is available, the Navy may want to invest in opening this new market. Here we offer some recommendations for doing so. Because of the lack of comprehensive data on recruiting in this market, the Navy should weigh the cost of each recommendation against the potential benefits. We suggest exploring the following:

- Expand the College Loan Repayment to include *all* college graduates.
- Develop a more comprehensive articulation agreement with community colleges.
- Require recruiters to attend community college job fairs.
- Encourage recruiters to take a class on campus during the day, using Tuition Assistance, and to attend in uniform.
- Request name lists from all 2-year and 4-year colleges under the Military Recruiter Access to Campus Law.
- Attend the American Association of Community Colleges' annual conference, both as a participant and as an exhibitor.
- Create more RADs for this market.
- Use the Internet more for both general and targeted advertisement and resume searches.
- Incorporate community college visits in the Recruiter Qualifications Standards.
- Send letters to the program directors of targeted majors.
- Develop Tech Prep partnerships with community colleges that can benefit both the college and the Navy in recruiting graduates in general and pretrained people in particular.

Community college graduates are not only good for Navy recruiting; they are good for the Navy. They have lower attrition, are more mature and more broadly trained, and qualify at higher rates for critical ratings. To be successful in this market, including recruiting pretrained people, everyone in the Navy who benefits must also be dedicated to the effort. However, given the nature of budget allocations, the costs to recruit these (most likely) more expensive people falls disproportionately on the recruiting command, which has already suffered budget cuts and is facing a daunting recruiting goal in FY 98. We recommend that Navy leadership consider reallocating some of the financial benefits that accrue from recruiting community college graduates back to Navy recruiting so that they can fully fund recruiting efforts in this market.

Appendix: Characteristics of pretrained HM recruits

Table 1. Summary information of the 29 HM recruits

Recruiting station ID	Enlistment date	Reservation date	Gender	NECs earned or area of specialty ^a	AFQT	Education	Assignment
102220	10/07/96	08/01/96	M	8404,8452	88	14 D	NNMC Bethesda
103030	10/04/96	07/29/96	M	8404,8452	86	14 L	BRMDCL Iwakuni
103190 ^b	10/24/96	10/01/96	M	8404,8452	74	15 D	NH Great Lakes
103300	09/30/96	07/15/96	M	8404,8452	76	14 D	NMC Portsmouth, NH
103301	09/12/96	05/14/96	M	8506	99	16 K	N Med Cent Portsmouth, VA
104164	06/17/96	03/18/96	F	8506	76	16 K	NMC San Diego
104397	11/19/96	09/27/96	M	8404,8452	79	14 L	NH Okinawa
119345	06/10/96	03/27/96	M	8452	71	14 D	NMC Annapolis
119345	10/28/96 ^c	03/27/96	F	radiography	45	10 M	
120092	09/26/96	04/26/96	F	8404,8452	45	13 L	NH Camp Lejeune
120100	11/07/96	10/03/96	M	8404,8452	99	16 K	NH Rota
120223	09/03/97	08/06/97	M	radiography	96	16 K	^d
120380	09/18/96	05/15/96	M	8404,8452	84	14 D	NH Okinawa
122130	12/19/96 ^c	12/05/96	M	radiography	46	14 D	
313020	07/28/97	04/30/97	M	clinical lab	59	14 D	^e
314040	01/28/97	01/09/97	M	clinical lab	85	13 D	^f
314040	07/08/97 ^c	03/11/97	F	clinical lab	74	14 L	
315130	08/26/96	03/26/96	F	8452	80	13 L	NH Naples, Italy
316070	08/28/97	07/24/97	M	radiography	46	16 K	^e
316140	09/19/96	07/15/96	F	8404,8452	67	14 D	N Med Cent Portsmouth, VA
334028	08/18/96	07/29/96	F	8506	84	14 L	BMCL Naval Station Norfolk
521525	09/10/96	05/18/96	F	8506	81	14 L	N Med Cent Portsmouth, VA
528419	10/29/96	10/16/96	M	8404,8452	70	14 L	First FSSG FMFPAC

Table 1. Summary information of the 29 HM recruits

Recruiting station ID	Enlistment date	Reservation date	Gender	NECs earned or area of specialty ^a	AFQT	Education	Assignment
529066	08/26/96	04/13/96	F	8404,8452	87	16 L	BMCL Sub Base Bangor, WA
531070	06/20/96	04/18/96	M	clinical lab	88	14 L	g
532030	07/21/97 ^c	03/31/97	F	radiography	65	15 D	
830010	08/28/96	04/17/96	M	8506	56	14 D	NMC San Diego
838390	01/06/97	09/26/96	M	8452	96	14 D	NMC San Diego
846050	07/09/97	04/07/97	M	radiography	44	14 D	e

a. Area of specialty is noted for those who either did not earn or have not yet earned the NEC or who have since separated from the Navy.

b. NaVet.

c. DEP attrite.

d. Currently in RTC.

e. Currently in HM A-School Great Lakes.

f. Discharged 10 July 1997 for Alcohol Abuse/Rehab Failure (EMR reason code JPD).

g. Discharged 7 March 1997 for Personality Disorder (EMR reason code GFX).

References

- [1] Peggy A. Golfin. *FY 1996 Navy Recruiting Efforts in Community Colleges: A Summary Report*, Feb 1997 (CNA Research Memorandum 97-10)
- [2] Peggy A. Golfin. *New Markets for Recruiting Quality Personnel*, Mar 1996 (CNA Research Memorandum 95-221)
- [3] National Center for Education Statistics web site: nces.ed.gov/pubs/ce/c9709D01.html.
- [4] National Center for Education Statistics web site: nces.ed.gov/pubs/pj/p97D02.html
- [5] Defense Manpower Data Center. *Youth Attitude Tracking Study 1996: Propensity and Advertising Report*, May 1997
- [6] John Burlage. "We've Got To Catch Up." *Navy Times*, 17 Nov 1997
- [7] Peggy A. Golfin and Scott E. Smith. *Technology and Navy Recruiting*, Oct 1997 (CNA Annotated Briefing 97-60)
- [8] U.S. White House web site: www1.whitehouse.gov/WH/dispatch/060496.html
- [9] White House Press Release. 26 Sep 1997
- [10] American Association of Community Colleges web site: www.aacc.nche.edu
- [11] Peggy A. Golfin with Lisa A. Curtin, CDR, USN. *Partnerships With Community Colleges: Vehicles To Benefit Navy Training and Recruiting*, Mar 1998 (CNA Research Memorandum 97-144)

- [12] Scott E. Smith and Peggy A. Golfin. *Recruiting on the World Wide Web*, Jan 1997 (CNA Annotated Briefing 96-99)
- [13] Institute for Electronics and Electrical Engineers web site: www.ieee.org
- [14] Aline O. Quester, Martha E. MacIlvaine, and Lisa C. Barfield, LCDR, USN. *Boot Camp Attrition and Measures of Accession Quality*, Jul 1997 (CNA Annotated Briefing 97-59)
- [15] American Medical Association. *Allied Health Education Directory: 1995-1996*. 23rd ed. AMA, 1995
- [16] Peggy A. Golfin, John D. White, and Lisa A. Curtin, CDR, USN. *A Role for Community Colleges in Navy Training*, Mar 1998 (CNA Research Memorandum 97-97)
- [17] Electronics Industries Foundation, *Raising the Standard: Electronics Technician Skills for Today and Tomorrow (A Project of the Electronic Industries Association and the Electronic Industries Foundation)*, Jun 1994 (performed under Grant Award Number V244A20012 from the Business and Education Standards Program, U.S. Department of Education)
- [18] *Peterson's Guide to Two-Year Colleges 1997*. 27th ed. Peterson's, 1996
- [19] Occupational Outlook Handbook web site: stats.bls.gov/oco/ocos/83.htm

List of figures

Figure 1.	Percentage of students attending a post-secondary institution within 2 years of high school graduation	8
Figure 2.	Absolute and relative numbers of accessions with Associate degrees.	12
Figure 3.	Absolute and relative numbers of accessions with 13 or 14 years of education	13
Figure 4.	Percentage of HM pretrained recruits graduating in the top of their class	35
Figure 5.	Number of HMs recruited by month.	36

Distribution list

SNDL

21A1 CINCLANTFLT NORFOLK VA

A1H ASSTSECNAV MRA WASHINGTON DC

Attn: ROSTKER

Attn: MAYBERRY

PERS-6

FJB1 COMNAVCRUITCOM WASHINGTON DC

Attn: COMMANDING OFFICER

Attn: CODE 00B

Attn: CODE 20

Attn: CODE 30

Attn: CODE 50

Attn: CODE 70

Attn: CODE 80

Attn: CODE 222

Attn: CODE 331

Attn: CODE 524

FT1 CNET PENSACOLA FL

Attn: TR1

Attn: SHOP1

Attn: ETE1

Attn: ETE51

FT31 NTC GREAT LAKES IL

Attn: COMMANDING OFFICER

OPNAV

N1

N12

N13

N132

N13T

N132C

N132D13

N132D6

N7

N73 J

N7B

N801D

N80D

N813

N81D